WHAT IS CLAIMED IS

- 1. A buttonhole sewing machine for producing buttonhole seams with seam end sections of various shapes in a work piece (24), comprising
- 5 a base plate (1), a top arm (2) and a standard (3) that unites the base plate (1) and the arm (2);
 - a needle bar (7), which is housed in the arm (2) and provided with a needle (8) and which reciprocates up and down, drivable by a main driving motor (5) substantially in a z direction;
- a table (17), which is displaceable by a y driving motor (18) in a y direction;
 - a work piece clamp (21), which is disposed on the table (17), clamping the work piece (24) on the table (17);
- a driving motor (14, 20) for producing a motion, in an x direction, of the needle (8) relative to the work piece (24);
 - a control system (40) for controlling the driving motors (5, 14, 18),
 - -- which an input equipment (38) for buttonhole-parameter input is allocated to,
- -- which comprises a computer (41) for computation, from the buttonhole parameters, of sewing data that determine a respective buttonhole geometry,
 - -- which comprises a memory (43) for storage of the computed sewing data, and
- -- which comprises a key (68) to be shifted into two key statuses and
 by which to trigger conversion of the sewing data of a buttonhole
 seam from a position to the left into a position to the right or vice
 versa, and storage thereof.

Ĺ

- 2. A buttonhole sewing machine according to claim 1, wherein a display (39) is provided, emitting information in accordance with a selected buttonhole position.
- 5 3. A buttonhole sewing machine according to claim 2, wherein the display (39) is configured for displaying a buttonhole picture.
 - 4. A buttonhole sewing machine according to claim 1, wherein the standard (3) stands back from a y-z plane that passes through the needle bar (7).
- 5. A buttonhole sewing machine according to claim 1, wherein the needle bar (7) is mounted on a needle-bar-swivel and -jog bearing (9) and drivable for rotation about a central longitudinal axis (13) by a swivel-bearing driving motor (10); and

10

25

- wherein the swivel-bearing driving motor (10) is triggered by the control system (40).
- 6. A buttonhole sewing machine according to claim 1,
 wherein the table (17) is drivable by an x driving motor (20) in the x direction; and
 wherein the x driving motor (20) is triggered by the control system (40).
 - 7. A buttonhole sewing machine according to claim 1, wherein a buttonhole cutting device (26) is provided, the cutting drive (29) of which is triggered by the control system (40).
 - 8. A buttonhole sewing machine according to claim 7,

wherein the buttonhole cutting device (26) has an anvil (28), which is displaceable into at least two different positions relative to a knife (34) by a displacement drive (35); and wherein the displacement drive (35) is triggered by the control system (40).

5